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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
	09/685,138	LEE, JU-HEON			
Office Action Summary	Examiner	Art Unit			
	TANH Q. NGUYEN	2182			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be time will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	l. lely filed the mailing date of this communication. (35 U.S.C. § 133).			
Status					
Responsive to communication(s) filed on 16 Ag This action is FINAL . 2b) ☑ This Since this application is in condition for allowant closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro				
Disposition of Claims					
4) ☐ Claim(s) 1,2,4-8,22-28 and 31-46 is/are pendin 4a) Of the above claim(s) is/are withdrav 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1,2,4-8,22-28,31-43 and 46 is/are rejee 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) 44 and 45 are subject to restriction an Application Papers 9) ☐ The specification is objected to by the Examiner 10) ☐ The drawing(s) filed on 11 October 2000 is/are:	vn from consideration. cted. d/or election requirement.	to by the Examiner.			
Applicant may not request that any objection to the orection Replacement drawing sheet(s) including the correction 11) The oath or declaration is objected to by the Expression 11.	on is required if the drawing(s) is obj	ected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.					
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 04/16/08.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	te			

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 16, 2008 has been entered.

Election/Restrictions

2. Newly submitted claims 44-45 are directed to inventions that are independent or distinct from the invention originally claimed for the following reasons:

Claim 44 is directed to an invention in which an absence of a computer readable readable code on a portable security device prevents an operating system of the data processing system from booting;

Claim 45 is directed to an invention in which an integrated circuit memory to store therein data of the data processing system is sufficient to substitute for a floppy disk drive thereof.

Note that the above inventions have acquired a separate status from the inventions already examined due to their recognized divergent subject matter, and there is nothing on the record that shows the above inventions to be <u>obvious variants</u> of the inventions already examined. Furthermore, the above inventions would require a

different field of search (i.e. new and different search queries) and/or a search in a different classification. The above inventions are also likely to raise different non-prior art issues under 35 USC 101 and/or 35 USC 112, and/or the prior art applicable to the inventions already examined would not be likely applicable to the above inventions. There would be a serious search and examination burden if restriction were not required for the reasons stated.

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Claims 1, 25, 33 and 46 link the above inventions to the inventions already examined. The restriction requirement between the linked inventions is subject to the nonallowance of the linking claims 1, 25, 33 and 46. Upon the indication of allowability of the linking claim(s), the restriction requirement as to the linked inventions shall be withdrawn and any claim(s) depending from or otherwise requiring all the limitations of the allowable linking claim(s) will be rejoined and fully examined for patentability in accordance with 37 CFR 1.104. Claims that require all the limitations of an allowable linking claim will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection, are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312. Applicant(s) are advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, the allowable linking claim, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Where a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. In re Ziegler, 443 F.2d 1211, 1215, 170 USPQ

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129, 131-32 (CCPA 1971). See also MPEP § 804.01.

The above inventions and the inventions already examined are also related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the instant case, subcombination with claim 44 has separate utility such as an absence of a computer readable readable code on a portable security device prevents an operating system of the data processing system from booting; and subcombination with claim 45 has separate utility such as an integrated circuit memory to store therein data of the data processing system is sufficient to substitute for a floppy disk drive thereof. See MPEP § 806.05(d). The examiner has required restriction between subcombinations usable together. Where applicant elects a subcombination and claims thereto are subsequently found allowable, any claim(s) depending from or otherwise requiring all the limitations of the allowable subcombination will be examined for patentability in accordance with 37 CFR 1.104. See MPEP § 821.04(a). Applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits.

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Accordingly, claims 44-45 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Objections

3. Claims 1, 25-27 are objected to because of the following informalities:

"for being connected" in line 3 of claim 1 should be replaced with --for connection-- to avoid interpretation that the connector being always connected

"to be connected" in line 8 of claim 1 should be replaced with --when connected-for clarity

"host" in line 4, "host" in line 6, "host" in line 8, "host" in line 10 - twice, "host" in line 11, "host" in line 13, "host" in line 16 of claim 25; "host" in line 2, "host" in line 3 of claim 26; "host" in line 3 of claim 27 should be replaced with --host computer-- for consistency

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

- 5. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 6. Claims 41-42 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which

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was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 38 recites "the cover has an overall interior opening of a thickness greater than the overall thickness of the flat ledge", and therefore cannot enable "the thickness of the retractable cover equals the overall thickness of the housing minus the overall thickness of the flat ledge" - as recited in claim 41, and further cannot enable "an overall outer thickness of the retractable cover equals the overall thickness of the housing" – as recited in claim 42.

Let the overall thickness of the flat ledge be A, and the overall thickness of the housing be B. The cover would have an interior opening of (A + epsilon), epsilon being a value that would make the interior opening thickness of the cover greater than the overall thickness of the flat ledge – as required by claim 38. Claim 41 requires the thickness of the cover being (B - A). Claims 38 and 41 would suggest the overall outer thickness of the cover being (A + epsilon) + (B - A), hence the overall outer thickness of cover being (B + epsilon).

The disclosure however discloses the overall outer thickness of the cover being the overall thickness of the housing (see FIGs. 2A-2C and FIGs. 4A-4B) – hence the overall outer thickness of the cover being B.

Claim 42 requires the overall outer thickness of the cover to be the overall thickness of the housing - hence the overall outer thickness of the cover being B.

Clearly B cannot be equal to (B + epsilon).

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7. Claims 1-2, 4-8, 22-24, 32 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites "the elastic bias" in line 8

Claim 8 recites "the security information of the memory device" in lines 2-3.

There are insufficient antecedent bases for the limitations in the respective claims.

8. The rejections that follow are based on the examiner's best interpretation of the claims.

Claim Rejections - 35 USC § 103

- 9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 10. Claims 1, 2, 4-6, 22-24, 33-40, 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abbott et al. (US 6,671,808) in view of Powell et al. (US 5,599,196); alternatively over Abbott et al. in view of Powell et al. and Liu (PTO 2007-2593: translation of CN 2032364U); and also alternatively over Abbott et al. in view of Powell et al. and Ellison (US 6,062,881).
- 11. As per claim 1, Abbott teaches a portable memory device [200, FIG. 1] for a

USB-supporting data processing system [102, FIG. 1; col. 5, lines 12-14], the memory device comprising:

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a USB connector [602, 604, 606 – FIG. 6H, FIG. 6I] for being connected to a USB port [130, FIG. 1] of the data processing system;

an integrated circuit memory [214, FIG. 2A] for writing/reading data [col. 5, lines 64-67]; and

a USB interface [210, FIG. 2A] coupled between the USB connector and the memory, for interfacing the memory with the data processing system [col. 5, lines 55-59].

Abbott does not teach a connector cover elastically biased to cover the USB connector when the portable memory device is not connected to the USB-supporting data processing system thereby protecting the USB connector from damage, the connector cover being slidably retractable against the elastic bias to expose the USB connector to be connected to the USB port.

Powell teaches a connector cover [14, FIGs. 9-12] elastically biased to cover a connector [104, 108 – FIG. 1] when the connector is not connected to a receptacle [FIGs. 9-10] thereby protecting the connector from damage [FIGs. 9-10 would have suggested to one of ordinary skill in the art to prevent external exposure of the connector with a connector cover – hence the connector being protected from damage by contact with other objects when it is inside the connector cover; col. 6, lines 54-56 further suggests using the connector cover in any application where protection is desirable for an item which is being inserted into a mating receiver], the connector cover

being slidably retractable against the elastic bias [30, FIG. 1] to expose the connector when the connector is connected to the receptacle [FIGs. 11-12].

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a connector cover, as is taught by Powell, in order to prevent external exposure of the USB connector and to provide protection to the USB connector when the memory device is not connected to the USB-supporting data processing system - thereby protecting the connector from damage.

Alternatively, Liu teaches a connector cover [13, FIG. 2] elastically biased to cover a connector [8, FIG. 2] when the connector is not connected to a receptacle [FIG. 2; page 3, line 6] thereby protecting the connector from damage [page 3, line 2], the connector cover being slidably retractable against the elastic bias [10, FIG. 2] to expose the connector when the connector is connected to the receptacle [page 5, lines 16-19]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a connector cover, as is taught by Powell, in order to protect the USB connector from being damaged and to prevent external exposure of the USB connector when the memory device is not connected to the USB-supporting data processing system - as is suggested by Liu and Powell.

Still alternatively, Ellison teaches a connector cover [60, FIG. 5] elastically biased to cover a connector [50, FIG. 5] when the connector is not connected to a receptacle [FIG. 3] thereby protecting the connector from damage [FIG. 3 would have suggested to one of ordinary skill in the art to prevent external exposure of the connector with a connector cover – hence the connector being protected from damage when it is inside

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the connector cover because the connector cover prevents other objects from coming into contact with the connector [Abstract, lines 1-3] and causing damage to the connector], the connector cover being slidably retractable against the elastic bias [75, FIG. 5] to expose the connector when the connector is connected to the receptacle [FIG. 4]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a connector cover, as is taught by Powell, in order to prevent external exposure of the USB connector and to prevent objects from coming into contact with the USB connector - thereby protecting the USB connector from damage when the memory device is not connected to the USB-supporting data processing system (as are suggested by Powell and Ellison).

12. <u>As per claims 2, 4-6,</u> Abbott teaches the memory being a non-volatile semiconductor memory [col. 3, lines 32-39];

the memory device being a portable memory device of the data processing system [col. 3, lines 32-39];

the memory device supporting a plug and play function, and the USB connector being capable of being connected and separated to/from the USB port of the data processing system while the data processing system is powered on [Hot swappable, and plug and play are characteristics of USB devices];

the memory device storing a security information [col. 3, lines 32-39];

13. <u>As per claim 22-24</u>, Powell teaches a spring [30, FIG. 1] coupled between the connector cover [14, FIG. 1] and a housing [16, 18 - FIG. 8] of the connector; the spring being compressed upon connecting the connector [FIGs. 11-12]; and the cover having a

ridge [24, FIG. 1] protruding from a slide portion [20, FIG. 1] of the cover that engages a concave groove [46, FIG. 1] in the housing enabling the cover to slide forwards and backwards with respect to the housing [FIGs. 9-12].

14. <u>As per claim 33</u>, Abbott teaches a portable memory device [200, FIG. 1] for a USB-supporting data processing system [102, FIG. 1; col. 5, lines 12-14], the memory device comprising:

a USB connector [602, 604, 606 – FIG. 6H, FIG. 6I] to be connected to a USB port [130, FIG. 1] of the data processing system;

an integrated circuit memory [214, FIG. 2A] for writing/reading data [col. 5, lines 64-67]; and

a USB interface [210, FIG. 2A] coupled between the USB connector and the memory, for interfacing the memory with the data processing system [col. 5, lines 55-59].

Abbott does not teach a retractable cover having a rectangular cross-section surrounding the USB connector, the retractable cover being elastically biased to protect the USB connector from damage when the portable memory device is not connected to the USB-supporting data processing system.

Powell teaches a retractable cover [14, FIGs. 9-12] having a rectangular cross-section surrounding a connector [14, FIG. 1; col. 6, lines 47-53], the retractable cover being elastically biased to protect the connector from damage when the connector is not connected to a receptacle (see teachings of Powell in the rejection of claim 1 above).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to add a retractable cover, as is taught by Powell, in order to prevent external exposure of the USB connector and to protect the USB connector from damage when the portable memory device is not connected to the USB-supporting data processing system.

Alternatively, Liu teaches a retractable cover [13, FIG. 2] elastically biased to protect a connector [8, FIG. 2] from damage [page 3, line 2] when the connector is not connected to a receptacle [FIG. 2; page 3, line 6]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a retractable cover, as is taught by Powell, in order to protect the USB connector from damage and to prevent external exposure of the USB connector when the portable memory device is not connected to the USB-supporting data processing system - as is suggested by Liu and Powell.

Still alternatively, Ellison teaches a retractable cover [60, FIG. 5] elastically biased to protect a connector [50, FIG. 5] when the connector is not connected to a receptacle [FIG. 3] thereby protecting the connector from damage (see teachings of Ellison in the rejection of claim 1 above). It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a retractable cover, as is taught by Powell, in order to prevent external exposure of the USB connector and to prevent objects from coming into contact with the USB connector - thereby protecting the USB connector from damage when the portable memory device is not connected to the USB-supporting data processing system (as are suggested by Powell and Ellison).

15. As per claim 34, Powell teaches a flat ledge [60, FIG. 1] and the retractable cover

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being a retractable sliding cover [FIGs. 9-12], the retractable sliding cover when retracted slides onto the flat ledge to accommodate the retractable sliding cover while permitting exposure of the connector sufficient to be connected to a receptacle [FIGs. 11-12], the retractable cover covering the connector when not retracted [FIGs. 9-10].

- 16. <u>As per claims 35-36</u>, Abbott teaches a housing [200, FIG. 6J] to accommodate the memory and the USB interface [FIG. 2A].
- 17. As per claims 37-38, Powell teaches the flat ledge having an overall thickness less than an overall thickness of a housing [18, FIG. 1] and the flat ledge being attached to the connector at an end thereof and to the housing at another end thereof [FIGs. 9-12], and the cover having an overall interior opening of a thickness greater than the overall thickness of the flat ledge [FIGs. 9-12].
- 18. As per claim 39, Powell teaches the flat ledge comprising a spring or a groove [FIGs. 9, 11]; the cover, the housing, and the flat ledge having a rectangular cross-sectional shape [FIGs. 1-8]; and Abbott teaches the housing and the USB connector having a rectangular cross-sectional shape.
- 19. As per claims 43, 40, Abbott teaches a hole formed through the housing, the hole having an oval shape [228, FIG. 2A].
- 20. Claims 1, 7-8 are rejected under 35 U.S.C. 103(a) as being obvious over Miller (US 6,038,320) in view of Powell et al. (US 5,599,196); alternatively over Miller in view of Powell et al. and Liu; and also alternatively over Miller in view of Powell et al. and Ellison.
- 21. As per claim 1, Miller teaches a portable memory device [FIG. 3] for a USB-

supporting data processing system [20, FIG. 2], the memory device comprising:

a USB connector [48, FIG. 3] for being connected to a USB port [31, FIG. 2; col.

2, lines 60-63] of the data processing system;

an integrated circuit memory [46, FIG. 3] for writing/reading data; and a USB interface [42, FIG. 3] coupled between the USB connector and the memory, for interfacing the memory with the data processing system.

Miller does not teach a connector cover elastically biased to cover the USB connector when the portable memory device is not connected to the USB-supporting data processing system thereby protecting the USB connector from damage, the connector cover being slidably retractable against the elastic bias to expose the USB connector to be connected to the USB port.

Powell teaches a connector cover [14, FIGs. 9-12] elastically biased to cover a connector [104, 108 – FIG. 1] when the connector is not connected to a receptacle [FIGs. 9-10] thereby protecting the connector from damage [FIGs. 9-10 would have suggested to one of ordinary skill in the art to prevent external exposure of the connector with a connector cover – hence the connector being protected from damage by contact with other objects when it is inside the connector cover; col. 6, lines 54-56 further suggests using the connector cover in any application where protection is desirable for an item which is being inserted into a mating receiver], the connector cover being slidably retractable against the elastic bias [30, FIG. 1] to expose the connector when the connector is connected to the receptacle [FIGs. 11-12].

It would have been obvious to one of ordinary skill in the art at the time the

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invention was made to add a connector cover, as is taught by Powell, in order to prevent external exposure of the USB connector and to provide protection to the USB connector when the memory device is not connected to the USB-supporting data processing system - thereby protecting the connector from damage.

Alternatively, Liu teaches a connector cover [13, FIG. 2] elastically biased to cover a connector [8, FIG. 2] when the connector is not connected to a receptacle [FIG. 2; page 3, line 6] thereby protecting the connector from damage [page 3, line 2], the connector cover being slidably retractable against the elastic bias [10, FIG. 2] to expose the connector when the connector is connected to the receptacle [page 5, lines 16-19]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a connector cover, as is taught by Powell, in order to protect the USB connector from being damaged and to prevent external exposure of the USB connector when the memory device is not connected to the USB-supporting data processing system - as is suggested by Liu and Powell.

Still alternatively, Ellison teaches a connector cover [60, FIG. 5] elastically biased to cover a connector [50, FIG. 5] when the connector is not connected to a receptacle [FIG. 3] thereby protecting the connector from damage [FIG. 3 would have suggested to one of ordinary skill in the art to prevent external exposure of the connector with a connector cover – hence the connector being protected from damage when it is inside the connector cover because the connector cover prevents other objects from coming into contact with the connector [Abstract, lines 1-3] and causing damage to the connector], the connector cover being slidably retractable against the elastic bias [75,

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FIG. 5] to expose the connector when the connector is connected to the receptacle [FIG. 4]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a connector cover, as is taught by Powell, in order to prevent external exposure of the USB connector and to prevent objects from coming into contact with the USB connector - thereby protecting the USB connector from damage when the memory device is not connected to the USB-supporting data processing system (as are suggested by Powell and Ellison).

- 22. <u>As per claims 7-8</u>, Miller teaches the data processing system storing a security information to verify an authorized user , wherein the data processing system boots up only when the security information of the memory device is matched with the security information of the data processing system [150, 200 FIG. 6; col. 4, lines 51-57; col. 5, lines 8-9].
- 23. Claims 25-28, 31-32, 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller in view of Crisan (US 6,292,890), and further in view of Powell et al.; alternatively over Miller in view of Crisan, and further in view of Powell et al and Liu; and also alternatively over Miller in view of Crisan and further in view of Powell et al. and Ellison.
- 24. As per claim 25, Miller teaches a method for securing a host computer [FIG. 6;
- FIG. 2 shows a host computer 20 with USB 28], comprising:

applying power to the host computer [100, FIG. 6];

determining whether a USB security device is attached to a USB port on the host computer [130, FIG. 6; col. 4, lines 40-47];

reading a password from the USB security device and comparing the read password with a password stored in the host computer [150, FIG. 6; col. 4, lines 51-57];

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preventing the host computer from being booted when the password on the USB security device does not match the password stored in the host computer [160, FIG. 6; col. 4, lines 55-61];

booting up the host computer only when the USB security device is attached to the USB port of the host computer and only when the password stored in the USB security device matches the password stored in the host computer [200, FIG. 6; col. 5, lines 8-11; col. 1, lines 28-30]; and

attaching the USB security device to the USB port of the host computer prior to when power is applied to the host computer [YES at 130, FIG. 6 suggests that the USB security device is attached prior to power up; YES at 140, FIG. 6 suggests that the USB security device is attached after power up; col. 4, lines 42-51].

Miller does not teach the step of displaying an error message if the USB device is not connected or when the security information does not match. Crisan teaches that it is common for error to be displayed for error encountered during the boot up process [background: col. 1, line 46 to col. 2, line 22].

It would have been obvious to one having ordinary skill in the art to implement the teaching of displaying an error message when an error is encountered during the boot up process, as is taught by Crisan, in order to inform the user of the error encountered during the boot up process in Miller (i.e. when the USB device is not connected or when the security information does not match during the boot up process

in Miller).

Miller does not teach the attaching operation comprising automatically sliding a cover on the USB security device backward in a direction opposite to a direction of inserting the USB security device into the USB port when the USB security device is attached to the USB port of the host computer.

Powell teaches automatically sliding a cover [14, FIGs. 11-12] on a plug backward in a direction opposite a direction of inserting the plug into a port when the plug is attached to the port to expose a connector of the plug only when inserted into the port [FIGs. 11-12], and to cover the connector when the plug is not inserted into the port [FIGs. 9-10] thereby protecting the connector from damage [FIGs. 9-10 would have suggested to one of ordinary skill in the art to prevent external exposure of the connector with a sliding cover the connector being protected from damage by contact with other objects - when it is inside the sliding cover; col. 6, lines 54-56 further suggests using the connector cover in any application where protection is desirable for an item which is being inserted into a mating receiver].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a sliding cover, as is taught by Powell, on the USB security device - hence automatically sliding a cover [14, FIGs. 11-12] on the USB security device backward in a direction opposite a direction of inserting the USB security device into the USB port of the host computer when the USB connector is attached to the USB port to expose the USB connector only when inserted into the USB port, in order to prevent external exposure of the USB connector and to protect the USB connector.

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Alternatively, Liu teaches automatically sliding a cover [13, FIG. 2] on a plug [FIG. 2] backward in a direction opposite a direction of inserting the plug into a port when the plug is attached to the port to expose a connector [8, FIG. 2] of the plug only when inserted into the port, and to cover the connector when the plug is not inserted into the port thereby protecting the connector from damage [FIG. 2; page 3, line 6; page 3, line 2]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a sliding cover, as is taught by Powell, on the USB security device in order to protect the USB connector from being damaged and to prevent external exposure of the USB connector - as is suggested by Liu and Powell.

Still alternatively, Ellison teaches automatically sliding a cover [60, FIG. 5] on a plug [10, FIG. 5] backward in a direction opposite a direction of inserting the plug into a port when the plug is attached to the port to expose a connector of the plug only when inserted into the port [FIG. 4], and to cover the connector when the plug is not inserted into the port [FIG. 3] thereby protecting the connector from damage [FIG. 3 would have suggested to one of ordinary skill in the art to prevent external exposure of the connector with a connector cover – hence the connector being protected from damage when it is inside the connector cover because the connector cover prevents other objects from coming into contact with the connector [Abstract, lines 1-3] and causing damage to the connector]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a sliding cover, as is taught by Powell, on the USB security device in order to prevent external exposure of the USB connector and to prevent objects from coming into contact with the USB connector, and thereby

protecting the USB connector from damage – as are suggested by Powell and Ellison.

25. As per claims 26-28, Miller teaches the computer being booted [200, FIG. 6] when the USB security device is attached to the USB port of the host computer and when the password stored in the USB security device matches the password stored in the host computer, hence teaches enabling a hard drive in the host computer when the computer is booted up;

booting up the host computer comprising loading an operating system in the host computer [col. 5, lines 10-11];

the reading and comparing being performed prior to when the host computer is booted up [150 is performed prior to 200, FIG. 6].

- 26. As per claim 31, see the rejection of claim 1 above.
- 27. As per claim 32, the claim generally corresponds to claim 31 and is rejected on the same basis.
- 28. As per claim 46, the claim generally corresponds to claim 25 with Miller further teaching determining whether the USB security device is attached to the USB port of the host computer prior to loading an operating system [130 prior to 200; col. 5, lines 10-11], preventing the operating system from loading when it is determined that the USB security device is not attached to the USB port of the host computer [200 not reached with NO at 130 and/or NO at 140 FIG. 6], preventing the operating system from loading when the code on the USB security device does not match the code stored in the host computer [160, FIG. 6], loading the operating system only when the USB security device is attached to the USB port of the host computer and only when the

code stored in the USB security device matches the code stored in the host computer [200, when YES at 130 and YES at 150 -FIG. 6; col. 5, lines 10-11]; and attaching the USB security device to the USB port of the host computer prior to the power being applied thereto (see teaching of Miller in rejection of claim 1 above), the attaching including inserting the USB security device into the USB port and thereby retracting a cover surrounding a connector on the USB security device by engaging with a periphery of the USB port responsive to the insertion of the USB security device (see teaching of Miller, Powell, Liu and Ellison and bases of rejection of claim 25 above).

- 29. Claims 25-28, 31-32, 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rallis et al. (US 6,189,099) in view of Crisan, and further in view of Powell et al.; alternatively over Rallis et al. in view of Crisan, and further in view of Powell et al and Liu; and also alternatively over Rallis et al. in view of Crisan and further in view of Powell et al. and Ellison.
- 30. <u>As per claim 25</u>, Rallis teaches a method for securing a host computer [FIG. 3], comprising:

applying power to the host computer [col. 2, lines 47-58];

determining whether a USB security device is attached to a USB port on the host computer [KEY DEVICE AVAILABLE? – FIG. 3];

reading a password from the USB security device and comparing the read password with a password stored in the host computer [2-3, FIG. 3];

preventing the host computer from being booted when the password on the USB security device does not match the password stored in the host computer [9 with

MATCH = NO after step 3 - FIG. 3;

booting up the host computer only when the USB security device is attached to the USB port of the host computer and only when the password stored in the USB security device matches the password stored in the host computer [col. 2, lines 55-58]; and

attaching the USB security device to the USB port of the host computer prior to when power is applied to the host computer [Abstract, lines 5-7].

See rejections of claims 25-28, 31-32 above for teachings of prior art and bases of rejection.

31. As per claims 26-28, 31 and 32, Rallis teaches enabling a hard drive in the host computer only when the USB security device is attached to the USB port of the host computer and only when the password stored in the USB security device matches the password stored in the host computer [5, FIG. 3]; booting up the host computer comprising loading an operating system in the host computer [col. 2, lines 55-58]; and the reading and comparing being performed prior to when the host computer is booted up [col. 2, lines 55-58].

As per claim 46, the claim generally corresponds to claim 25 with Rallis further teaching determining whether the USB security device is attached to the USB port of the host computer prior to loading an operating system [col. 2, lines 55-58], preventing the operating system from loading when it is determined that the USB security device is not attached to the USB port of the host computer [9 with KEY DEVICE AVAILABLE = NO, FIG. 3], preventing the operating system from loading when the code on the USB

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security device does not match the code stored in the host computer [9 with MATCH = NO after step 3 – FIG. 3], loading the operating system only when the USB security device is attached to the USB port of the host computer and only when the code stored in the USB security device matches the code stored in the host computer [col. 2, lines 55-58; col. 3, lines 63-67]. See rejections of claims 25, 46 above for teachings of prior art and bases of rejection.

Examiner's note: Examiner has cited particular page, column and line number(s) in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. Applicant needs to consider the references in their entirety as potentially teaching all or part of the claimed invention.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and verification of the metes and bounds of the claimed invention.

Double Patenting

32. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In *re Thorington*, 418 F.2d 528, 163 USPQ

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644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

33. Claims 1, 33-42 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 21, 26-28, 47-49, 51-56 of copending Application No. 11/410,105. Although the conflicting claims are not identical, they are not patentably distinct from each other because the limitations of claims 1 and 33-42 of the current application can be mapped out with claims 21, 26-28, 47-49, 51-56 of the copending application.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

34. Claims 2, 4-8, 22-24, 25-28, 31-32 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 21-23, 26-28 of copending Application No. 11/410,105 in view of Miller and/or Abbott. See teachings of Miller and Abbott above.

This is a <u>provisional</u> obviousness-type double patenting rejection.

Response to Arguments

35. Applicant's arguments filed April 16, 2008 have been fully considered but they are not persuasive and/or moot in view of the new grounds of rejection.

A. With respect to the rejections under 35 USC 112, the examiner has clarified the rejection – as requested by applicant.

B. With respect to evidence of non-obviousness, the examiner notes that neither She et al. (US 7,104,814) nor Tu (US 6,808,400) has the same structure as applicant's claimed invention. Furthermore, neither She nor Tu claims the same limitations as the claimed invention.

In addition, the argument regarding hindsight is not persuasive because it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Furthermore, the argument that the cover of an electrical connector would not have been applicable to a portable memory device is not persuasive because the connector of the portable memory device is an electrical connector; and because the prior art suggests preventing external exposure of the connector when it is not connected (e.g. Powell, Liu and Ellison above), protecting the connector from being damaged (e.g. Liu above), and preventing objects from coming into contact with the connector (e.g. Powell, Liu and Ellison above). The argument is also not persuasive because Powell suggests using the connector cover in any application where protection is desirable for an item which is being inserted into a mating receiver.

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C. With respect to the rejections under 35 USC 103, the examiner has included a copy of the translation of Liu - as requested by applicant. Note that the teachings of Liu can also be found in the text of the Fourth Office Action from the Patent Office of the People's Republic of China (page 2, third paragraph) submitted by applicant with the Information Disclosure Statement filed March 28, 2006.

With respect to the rejections of claims 25-28, 31-32 and the teachings of Miller, applicant's arguments are most in view of the new grounds of rejection.

With respect to the cover, the argument regarding non-analogous art is not persuasive because the particular problem with which the applicant was concerned is the prevention of external exposure of a connector, prevention of damage to a connector, and prevention of contact to a connector by other objects. Please note that Powell, Liu and Ellison are relied upon to teach a cover for a connector. The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Furthermore, Powell suggests using the connector cover in any application where protection is desirable for an item which is being inserted into a mating receiver.

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Conclusion

36. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Barajas et al. (US 6,167,291) teaches an electrical connector having a retractable sheath for conducting energy or collecting signals (Abstract; col. 1, lines 7-10).

37. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TANH Q. NGUYEN whose telephone number is (571)272-4154. The examiner can normally be reached on M-F (9:30AM-6:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TARIQ HAFIZ can be reached on (571)272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/TANH Q. NGUYEN/ Primary Examiner, Art Unit 2182

TQN: July 20, 2008